

incorporate by reference each of them, and respectfully submits that there is no *prima facie* obviousness.

However, even if the Examiner has stated a *prima facie* case of obviousness based on the argument that the products are the same or would have been obvious, Applicants respectfully submit that the evidence rebuts this position.

Tanimoto et al. teaches only electroplating or hot dipping an alloy layer (col.6, line 35), and fails to teach or suggest that the alloy layer be formed by an immersion plating process. The Examiner has posited that an immersion plated layer would be the same as, or would have been obvious over, the electroplated alloy layer of Tanimoto et al.. Applicants disagree with this position, and respectfully submit that this position is clearly erroneous, for at least the following reasons. As would be known to any person of ordinary skill in the art, and as shown by the following, an alloy layer formed by electroplating or hot dipping would be quite different from an alloy layer formed by immersion plating. The immersion plating process is quite different from an electroplating or hot dipping process, and it would not have been obvious to shift from electroplating or hot dipping to immersion plating.

Applicants submit herewith documentary evidence showing that an immersion-plated metal layer is different from an electroplated metal layer. Applicants submit that, based on this difference, use of immersion plating results in the formation of a different material. When this difference is taken together with the teaching away from immersion plating an alloy layer in Nakayama et al. (noted by Applicants in the previous Reply to Office Action), Applicants submit that the presently claimed invention would not have been obvious based on the asserted combination of these references.

First, Applicants submit U.S. Patent No. 4,234,621, which provides a detailed discussion of the many differences between an immersion plated metal layer and an electroplated (or electrodeposited) metal layer. As noted in the '621 patent, at col. 2, lines 51-58:

4,234,631
IBPatt
9/01/03